

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

08/825,492

03/28/97

HUGHES

D

81862.P072

LM02/1012

EXAMINER

TAREK N FAHMI
BLAKELY SOKOLOFF TAYLOR & ZAFMAN
7TH FLOOR
12400 WILSHIRE BOULEVARD
LOS ANGELES CA 90025

HSU, A

ART UNIT

PAPER NUMBER

2662

Re

DATE MAILED:

10/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 16

Application Number: 08/825,492 Filing Date: March 28, 1997

Appellant(s): David A. Hughes et al.

RECEIVED

OCT 12 2000

Group 2700

Tarek N. Fahmi
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed July 26, 2000.

I. REAL PARTY IN INTEREST

A statement identifying the real party in interest is contained in the brief.

II. RELATED APPEALS AND INTERFERENCES

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the

Page 2

Application/Control Number: 08/825,492

Art Unit: 2662

pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence

of any related appeals and interferences.

III. STATUS OF CLAIMS

The statement of the status of the claims contained in the brief is correct.

IV. STATUS OF AMENDMENT AFTER FINAL

No amendment after final has been filed.

V. SUMMARY

The summary of invention contained in the brief is correct.

VI. ISSUES

The appellant's statement of the issues in the brief is correct.

VII. GROUPING OF CLAIMS

The rejection of claims 1-3, 5-8, 14-16, 18-22, 24-26 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

Page 3

Application/Control Number: 08/825,492

Art Unit: 2662

VIII. CLAIMS APPEALED

The copy of the appealed claims contained in the Appendix to the brief is correct.

IX. PRIOR ART OF RECORD

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,509,007

Takashima

04-1996

X. GROUNDS OF REJECTION

Claims 1-3, 5-8, 14-16, 18-22, 24-26 are rejected under 35 U.S.C. 112, first paragraph. This rejection is set forth in prior Office action, Paper No. 11.

Claims 1-3, 5-8, 14-16, 18-22, 24-26 are rejected under 35 U.S.C. 102(a). This rejection is set forth in prior Office action, Paper No. 11.

Claims 21, 22 and 26 are rejected under 35 U.S.C. 101. This rejection is set forth in prior Office action, Paper No. 11.

XI. RESPONSE TO ARGUMENT

Appellant's arguments in the Appeal Brief filed July 26, 2000 have been fully considered but they are not persuasive.

In the ARGUMENT (Section VIII) of the Appeal Brief:

Application/Control Number: 08/825,492

Art Unit: 2662

A. Regarding the rejection of claims 1-3, 5-8, 14-16, 18-22 and 24-26 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The appellant argued that the claimed feature of a cell including information indicative of a merging method used is adequately disclosed in the present application by referring to page 8, lines 11-18 and page 8, line 21 to page 9, line 3 of the specification disclosure.

method" used in the header of the ATM cell is actually referring to the information regarding the number of cells being merged. See page 5, lines 9-11, it recites "The third ATM cell may include header information indicative of the number of partially filled ATM cells from which it was created" and page 9, lines 1-3, it recites "Thus, multiple merging methods could be supported on a single link. For example, VCI=32 could be used to indicate that two cells are merged while VCI=33 could be used to indicate that three cells are merged, and so on." This is unlike the appellant's assertion of the information indicative of a merging method of merging cells of fixed lengths or different lengths, or dropping the HEC byte, using a limited VPI/VCI field, or providing an error control byte as in the argument, which is not in the claims either. The purpose of showing the merging of multiple sub-cells in fixed length or different length is to demonstrate the possibility of varying merging schemes which can merge fixed length or different length sub-cells to form an ATM cell. The purpose of

Page 5

Application/Control Number: 08/825,492

Art Unit: 2662

dropping HEC byte or using limited VPI/VCI field is to improve the packing efficiency. The purpose of using error control byte is to provide the error control for reliability. None of the above features are included in the header part of the ATM cell as the information indicative of a merging method used as claimed. It is therefore the examiner's position to maintain the rejection of claims 1-3, 5-8, 14-16, 18-22 and 24-26 under 35 U.S.C. 112, first paragraph, since the claimed feature of an ATM cell including information indicative of a merging method used contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

B. Regarding the rejection of claims 1-3, 5-8, 14-16, 18-22 and 24-26 under 35 U.S.C. 102 (a), the appellant argued that although Takashima does disclose the merging of two or more ATM cells into a new ATM cell with the header include the information indicate the number of merged cells or the data boundaries of those cells, Takashima fails to teach or suggest the feature of including information indicative of a merging method used in the header of the new ATM cell as claimed.

The examiner disagrees since the so-called "information indicative of a merging method" used in the header of the claimed ATM cell is in fact referring to the information regarding the number of cells being merged only, not the actual information of using multiple sub-cells of fixed length or different lengths for merging, or dropping the HEC byte, or using a limited VPI/VCI field, or providing an error control byte as presented by

Application/Control Number: 08/825,492

Art Unit: 2662

the appellant in the argument. It is therefore the examiner's position to maintain the rejection of claims 1-3, 5-8, 14-16, 18-22 and 24-26 under 35 U.S.C. 102(a), since Takashima does disclose the claimed subject matter of merging two or more ATM cells into a new ATM cell with the header include the information indicate the number of merged cells which is also admitted by the appellant.

C. Regarding the rejection of claims 21, 22 and 26 under 35 U.S.C. 101, the appellant argued that the claimed ATM cell is a combination of information descriptions or representations organized to carry useful information between ATM devices, and an ATM is a specific arrangement of information elements assembled by computer processes under associated program control. These information elements are not simply abstract ideas, they are unique sequence of bits that exist within or among computer systems, with each bit sequence specifically identifying and representing an address, control information or user data information. Thus, the contents of an ATM cell are real, tangible things and should qualify as patentable subject matter.

The examiner disagrees since an ATM cell comprising a payload and a header is purely "data structures" per se, which does not fall into any statutory subject matter of process, machine, manufacture, or composition of matter. It is to be noted that the computers manage data by arranging the data in particular order or sequence. The relationship that exists among the ordered elements is called "data structure". Data structures in this sense are not statutory products because they are not physical "things" nor are they statutory processes, as they are

Page 7 Application/Control Number: 08/825,492

Art Unit: 2738 2662

not "acts" being performed. In other words, when defined without any physical structure, a "data structure" is nothing more than information that explains a relationship that exists among ordered data, and therefore is non-statutory. It is therefore, the examiner's position to maintain the rejection of claims 21, 22 and 26 under 35 U.S.C. 101.

For the above reasons, it is believed that all rejections should be sustained.

Respectfully submitted,

BHH Alpus H. Hsu October 4, 2000

ALPUS H. HSU PRIMARY EXAMINER

Alfam vo. vom